

## APPENDIX A: Year 2000 Progress Report

### Status of Department of the Interior's Year 2000 Efforts Quarterly Progress Report February 1999

**I. Overall Progress. Provide a report of the status of agency efforts to address the year 2000 problem, which includes an agency-wide status of the total number of mission-critical systems.**

For this table, the four right-hand columns ("Number compliant," "Number to be Replaced," "Number to be Repaired," and "Number to be Retired") must add up to the left hand column ("Total Number of Mission-Critical Systems"). Over time, as systems are implemented, the "Number to be Repaired" and "Number to be Replaced" will decline, while the "Number Compliant" will increase. Ultimately, the "Total Number of Mission-Critical Systems" will be equal to "Number Compliant." Similarly, the "Number to be Retired" will also decline as systems are actually retired. As this occurs, the Total Number of Mission-Critical systems will also decline, in order accurately reflect the total number of mission-critical systems left. Although the "Total Number of Mission-Critical Systems" should be fairly stable at this time, you should adjust this number, as well as the number in the relevant column on the right, as necessary, in order to reflect the identity of new systems or determinations that systems are not mission-critical. Any significant changes to the Total Number of Systems should be explained in a footnote.

Total Number of Mission-Critical Systems	Number Compliant	Number to be Replaced	Number to be Repaired	Number to be Retired
90	86	0	4	0

Since the November 1998 Quarterly Report, the Department of the Interior has continued making considerable progress across all areas of our Y2K program. We have completed 96% of our mission-critical systems, which is an improvement of 13% since the November report. March 1999 remains the Department's target for all mission critical systems' implementation. The chart in section II-i shows the progress made on mission critical systems renovated during the past three months.

The Department is also showing excellent progress in the IV&V phase, with 82% of all mission critical systems completed. Non-mission critical, embedded chip, and telecommunications systems also continue to show substantial progress.



**II. Progress of Systems Under Repair.** Provide a report of the status of agency efforts to address the year 2000 problem which includes the status of systems under repair.

a. In the first row, indicate the dates your agency has set for completing each phase. In each report, restate these dates and indicate if there has been a change.

In the second row, under "Total Number of Systems," indicate the baseline number of mission critical systems that *have been* or *will be* repaired. Footnote and explain any changes to this number. Also in the second row, present the number of mission-critical systems that have completed each phase of assessment, renovation, validation, and implementation.

	Total Number of Mission-Critical Systems	Assessment	Renovation	Validation	Implementation
Milestones	////////////////	March 1997	September1998	December1998	December 1998
Current Number Complete	84	84	84	82	80

The previous baseline was 85. In September, the failure to resolve the Automated Land and Minerals Reporting System (ALMRS) data conversion problems triggered the contingency plans for two legacy systems ALMRS was to replace. Accordingly, in the November 1988 Quarterly Report, the two legacy systems were moved from the "To Be Replaced" category into the "To Be Repaired" category. These two systems will be renovated, validated, and implemented by March 1999. While ALMRS was designed Y2K compliant, it will not be implemented by January 2000 and is no longer being tracked for Y2K purposes.

As indicated with the "Phase Progress Since November" graph in Section II-i, progress has been made in each phase, with significant gains in Implementation and IV&V. Our Renovation Phase is now 100% complete. The Validation Phase is now 98% complete and the Implementation Phase is 95% complete. All of these increases have exceeded our planned goals.

b. Provide a description of progress for fixing or replacing mission-critical systems. Please ensure that your report on the completion of phases is consistent with the CIO Council's best practices guide and GAO's assessment guide, Year 2000 Computing Crisis: An Assessment Guide.

The Department continues to make significant progress in each of the Y2K phases. With a proactive awareness program, powerful automated tools, and redirected staff, we have realized a 64% increase in the systems renovated since the August Quarterly Report and a 20% increase since the November.

- We have renovated, validated, and implemented 57 mission critical systems since the August Quarterly Report. Of these, 28 were delivered at least one month early and several as much as five months early.

- The Deputy CIO and senior staff continue to make on-site trips to bureau sites, to review plans, schedules, and progress. Each visit to the bureau sites has resulted in significant progress or accelerated schedules for planned delivery of software products.

**c. Provide a description of progress in fixing non-mission critical systems, including measures that demonstrate that progress.**

The Department and its bureaus continue to take an aggressive approach to managing nonmission-critical systems. The Department has completed plans and inventories to address hardware and software infrastructure, as well as telecommunications systems, including E-mail, DOINET, LAN management, building maintenance, and safety and emergency medical equipment. Systems and equipment are being reviewed as candidates for retirement where possible. Examples of significant progress are as follows:

- A draft Continuity of Operations Plan for the DOINET, which has been certified as Y2K compliant, is now being reviewed by the DOINET Advisory Committee chairman.
- The Bureau of Reclamation (BOR) has now remediated over 80% of their non-mission critical systems.
- The Bureau of Land Management (BLM) is using the same contractor (Mitretek) and the same process used on mission critical systems to ensure that all non-mission critical systems are validated Y2K compliant. They are on schedule to complete certification of these non-mission critical systems by March 1999.
- In the Office of Surface Mining (OSM), 18 of these systems have been retired and of the remaining 25 non-mission critical information systems, 24 have already been certified Y2K compliant. The one remaining system is scheduled for completion before March 1, 1999.
- The Minerals Management Service (MMS) will be retiring 12% of their non-mission critical systems and have remediated almost 60% of the remaining systems.
- Over 90% of non-mission critical systems are now Y2K compliant at the Fish and Wildlife Service (FWS).
- The National Park Service (NPS) has purchased over 15,000 licenses for Check/2000 and 21 "SWAT" teams have deployed to check and correct all NPS microcomputers. Over 80% of non-mission critical systems are now Y2K compliant.
- The U.S. Geological Survey (USGS) has now completed almost half of their non-mission critical systems needing renovation. With the use of Y2K emergency supplemental funds, contractor support is being used extensively in this phase of

remediation.

**d. Provide a description of the status of efforts to inventory all data exchanges with outside entities and the method for assuring that those organizations will be or have been contacted, particularly State governments. Provide a description of progress on making data exchanges compliant.**

All Interior components are following the guidelines outlined in the Department's IV&V Certification Policy, which was published in August 1998 and is available on the Department's Y2K Web page. Awareness letters and MOUs were sent to all Interior business partners in early October. Other examples of progress in this area include:

- Our Denver Administrative Service Center, which is the system administrator for the Federal Payroll/Personnel System, has identified all outside data exchange partners and has developed a testing strategy that will exercise all critical date code with these partners.
- The USGS has already completed testing with all of their data exchange partners. The results of these tests are stored in databases maintained by the system owners and any problems that were encountered are currently being resolved. No business impacts are anticipated.
- The Bureau of Land Management (BLM) has identified data exchanges at the Federal agency level and has coordinated activities with those agencies to ensure that date remediation efforts are properly scheduled. All other data exchange partners have been notified of format and display data provided by BLM.

**e. Provide a description of efforts to address the year 2000 problem in other areas, including biomedical and laboratory equipment and any other products or devices using embedded chips.**

Interior's components are making good progress in the embedded chips remediation process. Most bureaus and offices have completed their inventories and are working on remediation and certification. Five of eight bureaus are at least 70% complete and all Interior components provide monthly status reports to the CIO's Y2K Team at headquarters. The following are examples of status and progress in the embedded area.

- In BLM, inventories have been established by the states and funding within the safety program has been authorized to repair critical embedded microchips. Most of the medical devices are compliant and BLM has identified Global Positioning System (GPS) components used in fire and rescue, security systems, and alarms as critical components in need of replacement or repair. Field office safety officers are designated as the responsible officials for embedded microchips and provide monthly reports of their progress to headquarters. BLM has begun its IV&V of offices for embedded microchips and is scheduled to complete both site surveys and office reviews by March 31, 1999. Ten of 12 states estimate their percentage complete at 90%. BLM is implementing a Statement of Work with their new contractor to provide services such as a "Rapid Deployment Team" to

any state or area which is not meeting expectations.

- At the USGS, remediation of scientific instruments has been under way since the middle of 1998 and are now 63% compliant. The infusion of emergency supplemental funds has greatly accelerated the process, and has in fact made it possible to move away from costly and, in many cases, awkward and inefficient work-arounds to the preferred replacement of non-compliant and difficult to repair instruments.
- The National Park Service (NPS) has focused on improving its inventory of embedded systems and is performing IV&V on them. NPS maintains embedded systems ranging from wastewater treatment plants, where failure could damage and/or shut down major parks, to medical equipment, such as heart defibrillators, where failure could cost a life.

**f. Provide a description of efforts to address the year 2000 problem for buildings that your agency owns or manages. If your buildings are owned or managed by GSA, you should only report on those systems for which you have direct responsibility. You do not need to report on systems which are the responsibility of GSA. Please indicate if you are a member of the Building Systems Working Group of the Year 2000 Subcommittee of the CIO Council.**

The Department has performed an inventory and assessment of those facilities which it owns or manages. The completed inventory of the Main and South Interior buildings in Washington, D.C., turned up only one non-compliant embedded microchip. The USGS has discovered only three non-compliant embedded systems in over 40 buildings that they own or manage throughout the country. Based on the information they received from these 40 plus locations, they estimate that they are 80% complete.

**g. Provide a description of efforts to address the year 2000 problem in the telecommunications systems that your agency owns or manages. If your systems are owned or managed by GSA, you do not have to report on those systems. Please indicate instead whether or not you are a member of the Telecommunications Working Group of the Year 2000 Subcommittee of the CIO Council.**

We are actively participating on the Telecommunications Working Group of the Year 2000 Subcommittee of the CIO Council. The Department's Telecommunications Y2K Project Managers continue to meet monthly and collect status reports on a monthly.

The DASC has made noteworthy progress in remediating non-compliant telecommunications equipment. As you can see in *Attachment B*, all systems, with the exception of a couple of commercial services, have been remediated or replaced. The OSM is 98% compliant with 135 of their 138 telecom systems. The remaining three systems are scheduled for replacement. The Minerals Management Service (MMS) has 448 telecom systems of which 342 are Y2K compliant and 68 (modems, routers, and hubs in the Denver area) are scheduled for replacement. Email systems which are not already Y2K compliant are being replaced.

**h. Provide a description of the status of the year 2000 readiness of each**

**government-wide system operated by your agency (e.g., GSA will report on FTS 2000).**

The Department does not maintain any governmentwide systems.

**i. Please include any additional information that demonstrates your agency's progress. This could include charts or graphs indicating actual progress against your agency's schedule, lists of mission critical systems with schedules, success stories, or other presentations.**

The Chief Information Officer recognizes the importance of communicating to the public early, accurate and verifiable information on the state of readiness of the Department of the Interior and its bureaus. Such information can be instrumental in preventing public reactions disproportionate to the extent of any anticipated, perceived or actual problem as a result of the Year 2000 problem. The CIO's Y2K Team is working to ensure that the Secretary of the Interior, Interior's bureaus and employees have reliable information with which to reassure the public that Interior has exhibited due diligence in remediating Interior's systems, and that contingency plans are in effect for any unforeseen events.

The two main components of Interior's public relations efforts will be the Y2K Awareness Training Site and the CIO's Statement of Reasonable Assurance.

- In addition to our Y2K programmatic website, Interior has now developed a model Departmental Y2K Awareness Training website. The information contained at this site will also be published as a CD-ROM and distributed with other Awareness materials to bureaus and offices throughout Interior. The website includes information on the origins of the Y2K "bug," personal concerns and contingency planning, the six-phased approach for remediation and testing, contact information for Y2K executives and project team members Departmentwide, status of mission critical systems as of December 1998, embedded microchip and telecommunications definitions and details, and ideas throughout for what individuals can do to help avoid or overcome problems associated with the Y2K bug, both in the work place and in their homes. The model followed is applicable for any governmental agency interested in providing this level of information to either employees or the public. The site will provide Y2K Team members the ability to phone small groups in remote locations and provide awareness training to those gathered around an Internet-accessible workstation.
- In September 1999, the CIO will provide the Secretary, a "Statement of Reasonable Assurance for Y2K." This statement will provide assurance not only to the Secretary, but also to the President and the public that the Department of the Interior has taken all reasonable measures to mitigate the impact of the Year 2000 problem on mission-critical and mission-essential functions which depend upon information technology for their continued operation. This statement will include as supporting documentation a statement of the scope of the problem generally and

at Interior; what was done to identify, renovate, validate, and replace at-risk systems; how our progress was verified and validated; what elements are outside our control or remain at risk; and what we have done to limit the impact of any planned or unplanned events.

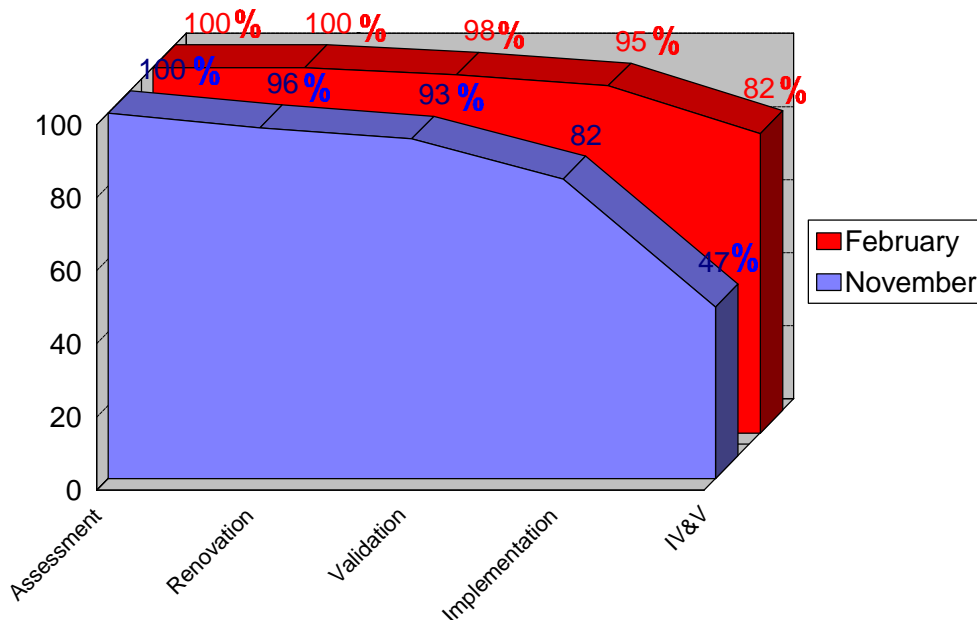
Current examples of our aggressive management of the Y2K problem are:

- We continue to hold weekly management meetings with the chairs of the Y2K Project Team, the Y2K Embedded Coordinators Team, the Y2K Telecommunications Team, and all Departmental managers, including the Deputy CIO, assigned to the Y2K effort. These meetings continue to be a useful tool to closely monitor the many schedules used to keep this effort on track.
- The Department's Continuity of Operations (COOP) Coordinator and his working group has developed a "Continuity of Operations/Business Continuity Plan" for the Department. *See Attachment A*. The COOP Coordinator continues his leadership role as chair of the Interagency Continuity of Operations Working Group.
- The Department continues to participate in 22 of the 26 Sector Working Groups and has the lead on the Surveying and Mapping sub-sector and the Natural Resources sub-sector groups.
- IV&V has now been completed on over 82% of our 90 mission critical systems.
- OSM is currently using an automated tool to evaluate all software, including COTS products that run on their microsystems.
- The Department's Office of the Solicitor has assigned full-time legal assistance to determine the extent and associated liability issues in both Departmental and personal issues.
- Developing advance planning for reporting readiness of systems starting the weekend of January 1, 2000 and contingency policy if problems arise.

A process has been implemented to track all Y2K supplemental funded projects for both financial and programmatic milestones. Monthly reporting includes a description of the status of each project to provide for intervention where timely accomplishment of Y2K objectives appears to be at risk. Monitoring expenditures and obligations against spending plans developed for each project provides another tool to measure planned against actual accomplishments. Expenditure monitoring also provides an audit trail for future review, including reconciliation of expenditures against amounts approved and those requested through the Online Payment and Collection System (OPAC).



### Phase Progress Since August 1998 Report



The chart above shows the continued progress made since the November 1998 Quarterly Report. At this time, all mission critical systems have completed the Renovation Phase and only three systems have not completed the Validation Phase. There are four systems remaining to be implemented back into production. All mission critical systems are on track to be Y2K compliant before the end of March 1999.

- DOI has a Team Leadership Program, with 27 “senior” participants, grades GS-13/14 and 19 “junior” participants, grades GS-11/12. Participants were asked to accept temporary assignments throughout the Department to broaden their understanding and skills. A small group of “senior” participants will have 30 or 90-day assignments with the Office of Information Resources Management. They will participate in our Y2K Awareness Project and our Embedded Chip activities.
- j. **Describe efforts to ensure that Federally-supported, State-run programs (including those programs run by Territories and the District of Columbia) will be able to provide services and benefits. In particular, Federal agencies should be sensitive to programs that will have a direct and immediate affect on individuals’ health, safety, or well-being. Include a description of efforts to assess the impact of the year 2000 problem and to assure that the program will operate. In addition, provide the following information for those programs listed in Attachment D (if the information is not available, provide dates when it will be available).**
  1. **The date when each State’s systems supporting the program will be**

**Y2K compliant.**

- 2. A list of States, if any, for which the Y2K problem is likely to cause significant difficulties in the State's operation of the program. Also provide a list of States which are not likely to encounter significant difficulties.**
- 3. For those States likely to have significant difficulties, a brief description of any action that the Department is taking to assure that the program will operate.**

Interior does not have any Federally supported, state run programs. We do, however, have a Tribal Outreach program that assists American Indian and Native American communities, partnerships with western states to supply hydro-electric power, and responsibility to provide technical assistance to our Trust Territories.

- Interior's Office of Insular Affairs (OIA) is aggressively pursuing awareness and assessment with all the U.S. trust territories and their Y2K contacts, through a contract with the U.S. Department of Agriculture Graduate School. USDA was chosen because they have a presence in the territories as well as the capability to perform the work. This is a particularly sensitive effort because historically these island governments have depended upon OIA's technical assistance grants to implement the systems which could be affected by the Y2K bug. Furthermore, the islands' fragile economies rely upon tourism, which has declined precipitously for the Pacific territories during the recent Asian economic crisis, and upon the steady flow of imported goods and materials which may be at risk after December, 1999. During the week of February 1, USDA, OIA technical assistance staff, and territorial representatives for financial management and Y2K will meet to develop common methods and strategies for assessment and renovation. Assessment is scheduled to be completed by mid-March, and under their contract with OIA, USDA will be actively involved in subsequent phases of renovation and testing.
- The BIA have been working with several other Federal agencies to ensure that all tribal leaders have the necessary information to bring their communities into Y2K compliance. The following are actions that Interior has taken to promote Y2K awareness throughout the nation.
  - Tribal members attended Y2K presentations at each of BIA's 12 area offices.
  - BIA's Y2K Team made a joint Y2K presentation, with the Indian Health Service, to the Navajo Nation in September 1998 and had has conducted several follow-on discussions with their Y2K Team providing technical and program management expertise.
  - Working with the GSA, BIA worked with the National Congress of American Indians to distribute Y2K information packages to the leaders of all 558 recognized tribes.

- During the week ending December 4, 1998, the Bureau of Indian Affairs, Alaska Area Office sponsored a Tribal Service Provider's Conference in Anchorage, Alaska. The BIA Y2K Tribal Outreach Team gave a Y2K Presentation to over 900 attendees at the General Session and a Y2K Awareness package was given to each attendee. Y2K Breakout sessions were also held during this conference. Over 220 recognized tribes were in attendance at this meeting.
- At the Tribal Service Providers Conference, the BIA Y2K Team agreed to participate in a Y2K "Special" for "Alaska Online," a weekly cable program. During this trip, the BIA Team also met with the Alaskan state Y2K Executive and the Indian Health Service (IHS) Alaska Y2K coordinator to discuss current Y2K activities within each organization and to coordinate future Y2K efforts.
- BIA will assist tribes in performing Y2K inventory and assessment of non-health related computer systems. This includes application software, commercial off-the-shelf software (COTS), personal computers, servers, telecommunication voice and data equipment and associated software, and embedded chips. The result of this effort will form a basis for tribal governments to plan and remediate non-compliant systems. BIA will provide the same level of resources to tribal governments that are currently operating Federal programs through P.L. 93-638 contracts or self governance compacts as is provided to the area and agency offices that are not contracted or compacted. The Bureau is in the process of securing additional funds from the OMB for future Y2K remediation efforts. These funds cannot be accurately budgeted until a complete inventory and assessment of tribal computer systems is performed. The BIA plans on completing the inventory and assessment process by mid-February, in time for March budget submission. BIA's Y2K Team, working with a contractor, will design and plan this survey to assess Y2K concerns within Tribal communities.
- As part of BIA's tribal Y2K awareness initiative, a Y2K brochure was prepared to assist Tribe's with Y2K information and references. BIA has also developed a Web-based Y2K Inventory Manager (YIM) for Y2K inventory and assessment for computer hardware, software, telecommunications/voice and embedded chips. YIM consists of a tribal database and can be used for Y2K inventory and assessment by tribes. Refer to <http://161.217.254.14/biay2k> for more information on YIM.
- The BIA Y2K Team has scheduled a Y2K meeting with all of the Tribes in Oklahoma on January 28, 1999.
- The Bureau of Reclamation is a major provider of electric power in the western United States. It's 59 powerplants provide over 14,000 Megawatts of generation capacity to the western electric grid. This power and energy is marketed by two Power Marketing Administrations (PMA's) in the Department of Energy. Reclamation is working closely with it's power marketing partners, and the North American Electric Reliability Council (NERC), to assure that the Y2K problem, the potential failure of certain computer systems,

on January 1, 2000 does not result in the collapse of the electric grid. Reclamation has inventoried all embedded microchips in its power control and operating systems and is taking steps to renovate any noncompliant devices, conduct independent validation and verification testing, certify all embedded chips as Y2K compliant, and prepare contingency plans to counter any unforeseen circumstances. In addition, Reclamation is working closely with the PMA's, the NERC, and the regional Western Systems Coordinating Council (WSCC) in the Y2K system-wide exercises scheduled for April and September. These exercises are to verify the integrity and the operational preparedness of the interconnected power system. Reclamation is committed to supporting these efforts to help assure a reliable power system as we enter the year 2000.

### **III. Verification Efforts.**

- a. Describe the process by which mission critical systems are identified as Y2K compliant for purposes of this report.**
- b. Describe how and to what extent internal performance reports, (i.e., compliance of systems repaired and replaced) are independently verified. Provide a brief description of activities to assure independent verification that systems are fixed and to assure that information reported is accurate. Also identify who is providing verification services (for example, Inspectors General or contractors).**

Independent verification and validation of repaired and replaced systems has been undertaken focusing on technical comprehensiveness, professional detachment and executive accountability. IV&V testing and certification have been scheduled for all mission-critical systems and are being planned for all Departmental systems, to include certain telecommunication and embedded systems. In two cases (BIA & MMS), an automated tool was used to assess code remediation. In the case of BIA, a contractor reviews the testing procedures and test results. To ensure independence in every case, bureau technicians must submit their completed tests to an independent group which had nothing to do with the remediation or testing of the system. The IV&V group follows Departmental guidelines, available at our Y2K Web site in PDF format (<http://www.doi.gov/oirm/y2k/news.html>), in assessing the effectiveness and completeness of the performed tests. In many cases, that group will perform a separate set of tests to determine Y2K readiness. As an added validation measure, the IV&V documentation contains signature documents including signatures by the technical and functional owners as well as program manager. A senior executive must also sign the package verifying their accountability for implementing the required procedures. Bureaus have taken leadership in making appropriate modifications to the Departmental guidelines to strengthen procedures to conform to the technical environments of the various field sites. The Office of the Inspector General continues to provide assessment reports of bureau procedures and progress, using specific criteria as outlined by the Chief Information Officer's staff. At the direction of the CIO, the IG has assisted in reviewing not only specific technical and procedural aspects of the project, but an assessment of the overall readiness of the bureau. Additionally, periodic site visits with each of the bureaus by the Deputy Director have proven invaluable, both for the Department and the bureaus, in maintaining focus on

Y2K priorities in the midst of other critical business requirements.

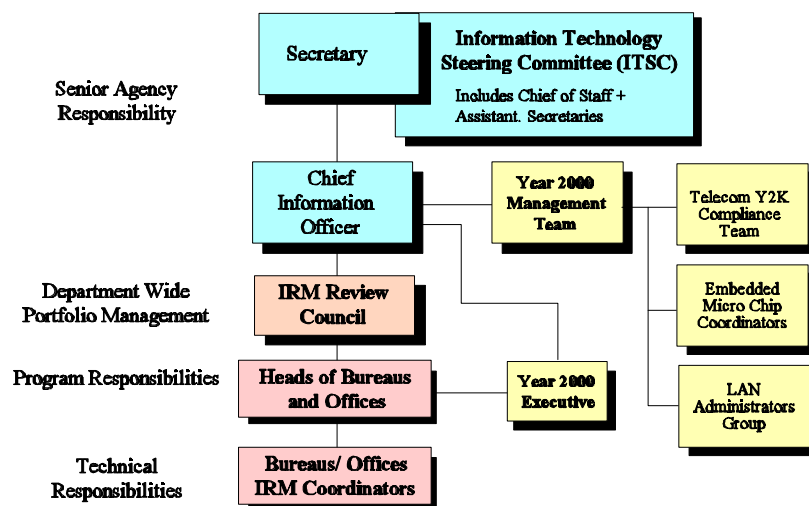
As a final IV&V review, the Department plans to perform an executive review of IV&V procedures and tests for key and representative systems throughout the bureaus, using a portion of the Y2K supplemental funds. Although all of the Department's mission critical systems have been thoroughly tested and validated using the certification procedures published last year, this additional level of review provides assurances for bureau implementation of IV&V procedures as well as allowing a look at some of the essential support systems not defined as mission critical, but key to important business functions nonetheless. This contract will help provide input to the "Statement of Reasonable Assurance" asserting the Department of the Interior's readiness to provide all of our key products and services to our business partners and the American public in January, 2000.

#### **IV. Organizational Responsibilities.**

**a. Describe how your Department/Agency is organized to track progress in addressing the year 2000 problem. (If you have provided this information in the past, only provide it again where it has changed.) Include in your description the following:**

**(1) Describe the responsible organization(s) for addressing the year 2000 problem within your Department/Agency and provide an organizational chart.**

The Department is maintaining its tiered approach to managing the Y2K problem as shown in the following chart.



**(2) Describe your Department/Agency's processes for assuring internal**

**accountability of the responsible organizations. Indicate how frequently the agency head or Chief Operating Officer is briefed on year 2000 progress. Include any quantitative measures used to track performance and other methods to determine whether the responsible organizations are performing according to plan. Include a discussion of the oversight mechanism(s) used to assure that replacement systems are on schedule.**

Since the November Quarterly Report, the Department has continued its aggressive management of the Y2K problem. Some key events in this time period include:

- The Department's Inspector General continues its reviews of bureau progress in assessing, renovating, testing, and implementing Y2K compliant code.
- The Department's CIO continues to meet quarterly, and in some cases monthly, with program assistant secretaries and bureau chiefs to review the progress in each of their areas of oversight.
- On February 4, 1999, the CIO briefed the February 1999 OMB Quarterly Report to the Interior Information Technology Steering Committee, which includes assistant secretaries and bureau chiefs and is chaired by the Chief of Staff (Chief Operating Officer).
- The Interior Management Council which is comprised of bureau deputy directors and co-chaired by the Assistant Secretary for Policy, Management, and Budget and the Deputy Chief of Staff, meets monthly to review the Department's Y2K progress. The last meeting was February 1, 1999.

**(3) Describe the management actions taken and by whom when a responsible organization falls behind schedule.**

The CIO and Deputy CIO meet with the bureaus' Y2K Executives to discuss alternatives to compress the schedule. They also discuss reprogramming funds and the diversion of staff resources from other bureau programs. Currently, no mission-critical systems are scheduled for implementation beyond March 1999.

**V. Business Continuity and Contingency Planning. Describe your agency's approach to and progress in developing its Business Continuity and Contingency Plan (BCCP). Agencies should use the GAO document, Year 2000 Computing Crisis: Business Continuity and Contingency Planning, (August 1998), as a guide to such planning. Describe the measures of progress being used to assure that local plans are developed and tested (e.g. status of management assurances that plans are complete and have been tested) and provide a status of those measures. Please also include the following information<sup>1</sup> in the description**

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<sup>1</sup> If your agency has completed an agency-wide plan which includes this information, provide a copy of it. in lieu of providing the information.

**of your planning activity (If you do not have the information requested, state when it will be available.):**

- 1. Identify the high-level core business functions addressed in your BCCP.**
- 2. Provide a master schedule and key milestones for development, testing, and implementation of your BCCP.**

See **Attachment A**, “Continuity of Operations/Business Continuity Plan - U.S. Department of the Interior.”

Review of existing “Continuity of Operations” plans (COOPs) has been a primary task of the IG review teams. Department-wide bureaus are updating and/or developing COOPs according to the March 1998 departmental guidance requiring preparation of COOPs for all organizational elements of the Department (that is, offices, facilities, administrative units, and other locations and site where functions of the Department are conducted). A large number of COOPs, particularly within BOR, have already been reviewed and updated for Y2K actions. Embedded and telecommunications areas are also addressing required contingency plans in their support of providing essential business systems within the Department.

Contingency plans are required for all mission critical systems which fall behind schedule. With the aggressive delivery of implemented systems this fall, only the ALMRS project has had to develop and execute a contingency plan. That plan has been reviewed and implemented to meet the March 1999 milestone.

#### **VI. Exception Report on Systems.**

**Provide a brief status of work on each mission critical system which is not year 2000 compliant that is either (1) being replaced and has fallen behind the agency’s internal schedule by two months or more, or (2) being repaired and has fallen behind the agency’s milestones by two months or more.**

- a. If this is the first time this system is reported, include:**
  - (1) An explanation of why the effort to fix or replace the system has fallen behind and what is being done to bring the effort back on schedule.**
  - (2) The new schedule for replacement or completion of the remaining phases.**
  - (3) A description of the funding and other resources being devoted to completing the replacement or fixing the system.**
- b. If this system has been previously reported and remains behind schedule, include:**
  - (1) An explanation of why the system remains behind schedule and what**

actions are being taken to mitigate the situation.

**(2) A summary of the contingency plan for performing the function supported by the system should the replacement or conversion effort not be completed on time. Indicate when the contingency plan would be triggered, and provide an assessment of the effect on agency operations should the system fail. If you do not yet have a contingency plan, indicate when it will be in place.**

Supervisory Control and Data Acquisition (SCADA) System - Bureau of Reclamation: This system was validated by GE-Harris in December 1998 and certified Y2K compliant three months ahead of schedule. This system will no longer be reported as an exception.

Global Seismic Network (GSN) - U.S. Geological Survey: Validation was completed in October 1998, two months earlier than scheduled. The personnel costs estimated to bring GSN into Y2K compliance are currently \$88,640. Implementation and IV&V are currently 72% complete, and on schedule for February 1999 completion. This system will no longer be reported as an exception.

## **VII. Systems scheduled for implementation after March 1999.**

**Please include a list of those mission critical systems where repair *or* replacement cannot be implemented by the March 1999 deadline. The list should include:**

- a. The titles of the systems.
- b. A brief description of what the system does.
- c. The reason that the system cannot be implemented by the deadline.
- d. A summary of the contingency plan for performing the function supported by the system should the replacement or conversion effort not be completed on time. Indicate when the contingency plan would be triggered, and provide an assessment of the effect on agency operations should the system fail, including anticipated problems. If you do not yet have a contingency plan, indicate when it will be in place.

The Department does not have any systems scheduled to be implemented after March 1999.

## **VIII. Other Management Information.**

- a. On the first row, report your estimates of costs associated with year 2000 remediation, including both information technology costs as well as costs associated with non-IT systems. Report totals in millions of dollars. (For amounts under \$10 million, report to tenths of a million.)



Fiscal Year	1996	1997	1998	1999	2000	Total
Current Cost	0.2	2.8	10.6	*63.2	0.7	77.5

\*This number includes the \$21.1M previously reported and the \$52.1M made available by the Emergency Supplemental Funds for Y2K. We are confirming with each of our bureaus their FY1999 planned expenditures to verify those previous estimates.

**b. If there have been dramatic changes in cost, please explain.**

Completion of highest priority mission critical systems has freed resources and personnel to focus on other key concerns throughout the Department. The intense scrutiny of the IV&V process and final testing of those mission critical systems uncovered a variety of issues related to other systems within the Department. Each bureau and office has identified required upgrades and replacements within systems supporting essential business functions, not defined as mission critical, but important to bureau and office operations. Thus far, the Department of the Interior acquired \$52.1 million in FY 1999 Y2K emergency supplemental funds. Special attention was given to the Native American Tribal Outreach, with some software and hardware acquired earlier for tribes requiring upgrades and replacements. Specific contract and compact obligations are being assessed as well as appropriate advisory services. Likewise, in our Office of Insular Affairs (OIA), efforts to support the island territories with assessments and project plans to assist their Y2K activities has met with initial success. Other key scientific and engineering equipment was identified in a variety of bureaus through the intensified efforts in assessing embedded microchip technology. As implementation of these key systems is completed, renewed IV&V efforts and continuity of business operations activities are planned. Several exercises are planned during this year to demonstrate the Department's readiness to provide continued service to the American public.

**c. If there have been significant changes to your agency's schedule, changes in the number of mission critical systems, changes to the number of systems behind schedule, please explain.**

Changes to the Department's schedule have been in the direction of compressing the schedule. This trend is evidenced by the expected implementation of all systems by the March 1999 date.

**d. Are there any concerns with the availability of key personnel?**

Unforeseen retirements may have an unexpected impact. The Department of the Interior has been issued early retirement authority by OPM, which is effective until September 30, 1999.

**e. Are there any other problems affecting progress?**

As is often quoted, "it is what we don't know" that will prove to be the most troublesome problem. Y2K is a risky business which requires our constant vigilance.